RICOH



RICOH WG-4 GPS RICOH WG-4



Thank you for purchasing this RICOH WG-4 GPS/RICOH WG-4 Digital Camera.

This camera is waterproof, dustproof, and shockproof, as shown below, so you can use it in a wide range of outdoor activities.

Waterproof/dustproof: JIS grade 8 waterproof and grade 6 dustproof (IP68)

Shockproof: Satisfies our drop test (2.0 m height onto a 5 cm thick plywood surface) complying with MIL-Standard 810F Method 516.5-Shock testing.

- * Waterproof performance is not guaranteed if the camera is exposed to impact such as being dropped or hit.
- * The camera is not guaranteed to be free of trouble or damage under every condition.

To users of this camera

- Do not use or store this camera in the vicinity of equipment that generates strong electromagnetic radiation or magnetic fields.
 Strong static charges or the magnetic fields produced by equipment such as radio transmitters could interfere with the display, damage the stored data, or affect the camera's internal circuitry and cause camera misoperation.
- The liquid crystal panel used for the display is manufactured using extremely high precision technology. Although the level of functioning pixels is 99.99% or better, you should be aware that 0.01% or fewer of the pixels may not illuminate or may illuminate when they should not. However, this has no effect on the recorded image.
- There is a possibility that the illustrations and the screen display in this
 manual are different from the actual ones.
- In this manual, SD Memory Cards, SDHC Memory Cards and SDXC Memory Cards are referred to as SD Memory Cards.
- In this manual, the generic term "computer(s)" refers to either a Windows PC or a Macintosh.
- In this manual, the term "battery(ies)" refers to any type of batteries used for this camera and its accessories.

Using Your Camera Safely

We have paid close attention to the safety of this camera. When using this camera, we request your special attention regarding items marked with the following symbols.



Warning

This symbol indicates that ignoring this item could cause serious personal injuries.



Caution

This symbol indicates that ignoring this item could cause minor or medium personal injuries, or loss of property.

About the Camera



- Do not attempt to take the camera apart or modify the camera. High voltages are present within the camera, and there is a danger of electric shock if the camera is taken apart.
- If the inside of the camera should become exposed as a result of, for example, the camera being dropped, please do not under any circumstances touch such exposed portions, as there is a danger of receiving an electric shock.
- Wrapping the strap around a neck is dangerous. Take care that small children do not hang the strap around their necks.
- If any irregularities occur during use, such as smoke or a strange odor, stop use immediately, remove the battery or the AC adapter, and contact your nearest Service Center. Continued use can cause a fire or electric shock.



Caution

- Do not place your finger on the flash when it is discharging as there is a risk of burns.
- Do not discharge the flash while it is touching your clothing as there is a risk of discoloring.

- Some portions of the camera heat up during use, so please take care, as there is a risk of low temperature burns if such portions are held for long periods of time.
- Should the display be damaged, be careful of glass fragments. Also, be careful not to allow the liquid crystal to get on your skin, in your eyes, or in your mouth.
- · Depending on your individual factors or physical condition, the use of the camera may cause itching, rashes or blisters. In case of any abnormality, stop using the camera and get medical attention immediately.

About the Power Adapter and the AC Adapter



♠ Warning

- Always use the power adapter or AC adapter exclusively developed for this camera, with the specified power and voltage. Using a power adapter or AC adapter not exclusive to this camera, or using the exclusive power adapter or AC adapter with an unspecified power or voltage can cause a fire, electric shock, or camera breakdown. The specified voltage is 100-240V AC.
- Do not disassemble or modify the product. This can cause a fire or electric shock.
- If the generation of smoke or strange odor from the product or other abnormality occurs, immediately discontinue its use and consult your nearest service center. Continued use can cause a fire or electric shock
- If water should happen to get inside the product, consult your nearest service center. Continued use can cause a fire or electric shock.
- If you see a lightning flash or hear thunder during use of the power adapter or AC adapter, unplug the AC plug and discontinue use. Continued use can cause damage to the product, fire, or electric shock.
- Wipe off the AC plug if it becomes covered with dust. Accumulated dust may cause a fire.



!\ Caution

- · Do not place or drop heavy objects on or forcefully bend the USB cord or AC plug cord. Doing so may damage the cord. Should the cord be damaged, consult your nearest service center.
- Do not touch or short-circuit the terminal area of the USB cord or AC plug cord while the cord is plugged in.
- Do not handle the AC plug with wet hands. This can cause an electric shock.
- Do not subject the product to strong impacts or allow it to drop onto a hard surface. This can cause a malfunction.
- Do not use the power adapter to charge a battery other than a rechargeable lithium-ion battery D-LI92. This can cause overheating, explosion, or power adapter failure.
- To reduce the risk of hazards, use only a CSA/UL certified power supply cord set, cord is Type SPT-2 or heavier, minimum NO.18 AWG copper, one end with a molded-on male attachment plug cap (with a specified NEMA configuration), and the other is provided with a molded-on female connector body (with a specified IEC nonindustrial type configuration) or the equivalent.

About the Battery



∕!\ Warning

- · Be sure to store the battery out of the reach of small children. Placing it in their mouths may cause an electric shock.
- If any leakage from the battery should come in contact with your eyes, it may cause a loss of sight. Flush your eyes with clean water and get medical attention immediately. Do not rub them.



Caution

- · Only use the specified battery with this camera. Use of other batteries may cause an explosion or fire.
- · Do not disassemble the battery. Disassembling the battery may cause an explosion or leakage.

- Remove the battery from the camera immediately if it becomes hot or begins to smoke. Be careful not to burn yourself during removal.
- Keep wires, hairpins, and other metal objects away from the + and contacts of the battery.
- Do not short the battery or dispose of the battery in fire. This can cause an explosion or fire.
- If any leakage from the battery should come in contact with skin or clothes, it may cause irritation to the skin. Wash the affected areas thoroughly with water.
- Precautions for D-LI92 Battery Usage:
 BATTERY MAY EXPLODE OR FIRE IF MISTREATED.
 - DO NOT DISASSEMBLE OR DISPOSE OF IN FIRE.
 - DO NOT CHARGE EXCEPT SPECIFIED CHARGING CONDITION.
 - DO NOT HEAT ABOVE 140°F / 60°C, OR SHORT CIRCUIT.
 - DO NOT CRUSH OR MODIFY.

Keep the Camera and its Accessories out of the Reach of Small Children



- Be sure to keep the camera and its accessories out of the reach of small children.
 - Injuries may result from the product falling or from unexpected movement.
 - 2. Suffocation may result from wrapping the strap around the neck.
 - Small accessories such as battery or an SD Memory Card may be swallowed. Seek medical attention immediately if an accessory is accidentally swallowed.

Care to be Taken During Handling

Before Using Your Camera

- When traveling, take the Worldwide Service Network listing that is included in the package. This will be useful if you experience problems abroad.
- When the camera has not been used for a long time, confirm that it is still working properly, particularly prior to taking important pictures (such as at a wedding or when traveling). Contents of the recording cannot be guaranteed if recording, playback or transferring your data to a computer, etc. is not possible due to a malfunction of your camera or recording media (SD Memory Card), etc.
- The lens on this camera is not interchangeable. The lens is not removable.

About the Battery and Power Adapter

- To keep the battery in optimum condition, avoid storing it in a fully charged state or in high temperatures.
- If the battery is left inserted and the camera is not used for a long time, the battery will over-discharge and shorten the battery's life.
- Charging the battery a day before use or on the day of use is recommended.
- The AC plug adapter D-PL135 is designed for exclusive use with the Power Adapter D-PA135. Do not use it with other devices.

Precautions on Carrying and Using Your Camera

- Hot and humid places should be avoided. Particular care should be taken regarding vehicles, which can become very hot inside.
- Ensure that the camera is not subjected to substantial vibrations, shocks, or pressure as this may cause damage, malfunction, or a loss in waterproof performance. Place the camera on a cushion for protection when the camera is subjected to the vibrations of a motorbike, car, ship, etc. If the camera is subjected to substantial vibrations, shocks, or pressure, take your camera to your nearest service center and have it checked.

- The temperature range in which the camera can be used is -10°C to 40°C (14°F to 104°F).
- The display will become black at high temperatures but will return to normal at normal temperatures.
- The response speed of the display becomes slow at low temperatures.
 This is due to the properties of the liquid crystal and is not a malfunction
- If the camera is subjected to rapid temperature changes, condensation
 may form on the inside and outside of the camera. Therefore put the
 camera in a bag or plastic bag and take it out when the difference in
 temperature has subsided.
- Avoid contact with garbage, mud, sand, dust, water, toxic gases, or salt. These could cause the camera to breakdown. Wipe the camera to dry off any rain or water drops.
- Do not press the display with excessive force. This could cause it to break or malfunction.
- Be careful not to sit down with the camera in your back pocket as this
 may damage the exterior of the camera or the display.
- When using a tripod with the camera, be careful not to overtighten the screw in the tripod socket on the camera.

Cleaning Your Camera

- Do not clean the camera with organic solvents such as thinner, alcohol or benzine.
- Use a lens brush to remove dust accumulated on the lens. Never use a spray blower for cleaning as it may damage the lens.

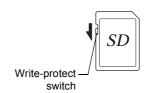
Storing Your Camera

- Avoid storing the camera where pesticides and chemicals are handled.
 Remove the camera from its case and store it in a well-ventilated place to prevent the camera from becoming moldy during storage.
- Avoid using or storing the camera where it may be exposed to static electricity or electrical interference.

- Avoid using or storing the camera in direct sunlight or in locations where it may be exposed to rapid changes in temperature or to condensation.
- Periodic inspections are recommended every one to two years to maintain high performance.

Other Precautions

 The SD Memory Card is equipped with a write-protect switch. Setting the switch to LOCK prevents new data from being recorded on the card, the stored data from being deleted, and the card from being formatted by the camera or computer.



- □ appears on the display when the card is write-protected.
- Care should be taken when removing the SD Memory Card immediately after using the camera, as the card may be hot.
- Keep the battery cover closed and do not remove the SD Memory Card
 or turn the camera off while the data is being played back or saved to
 the card, or the camera is connected to a computer with the USB cable,
 as this may cause the data to be lost or the card to be damaged.
- Do not bend the SD Memory Card or subject it to violent impact. Keep it away from water and store away from high temperature.
- Do not remove the SD Memory Card during formatting as this may damage the card and render it unusable.
- The data on the SD Memory Card may be lost in the following circumstances. We do not accept any liability for data that is deleted
 - (1) when the SD Memory Card is mishandled by the user.
 - (2) when the SD Memory Card is exposed to static electricity or electrical interference.
 - (3) when the SD Memory Card has not been used for a long time.
 - (4) when the SD Memory Card is ejected or the batteries are removed while the card is being accessed.

- If it is not used for a long time, the data on the card may become unreadable. Be sure to regularly make a backup of important data on a computer.
- Be sure to format SD Memory Cards that are unused or have been used on another camera.
- When using an SD Memory Card with a slow recording speed, recording may stop while recording a movie even if there is adequate space in the memory, or image capture or playback may take a long time
- Please note that deleting data, or formatting the SD Memory Cards or the built-in memory does not completely erase the original data.
 Deleted files can sometimes be recovered using commercially available software. It is user's responsibility to ensure the privacy of such data.

Checking the Contents of the Package

Check that your camera came complete with the items listed below.

- □ Camera (RICOH WG-4 GPS / RICOH WG-4)
- □ Carabiner strap
 - * The type of the carabiner strap supplied with the camera varies depending on the model or body color of the camera.



□ Software (CD-ROM) S-SW145



□ USB cable (I-USB7)



(D-LI92)



☐ Rechargeable lithium-ion battery ☐ Power adapter D-PA135 (AC plug adapter D-PL135 attached)



□ Macro stand (O-MS2)

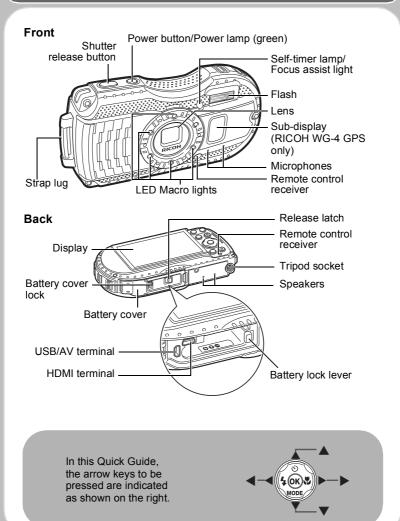




Operating Manual

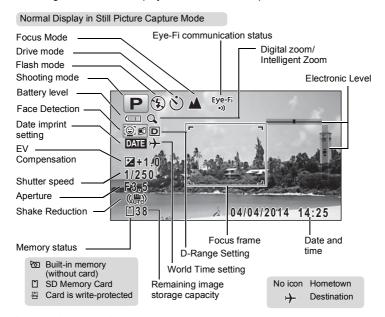
□ Quick Guide (this guide)

Names of Parts and Display Indicators



Display Indicators

Following indicators are displayed in Still Picture Capture Mode.



Battery Level Indicator

You can check the battery level by the 📺 indicator on the display.

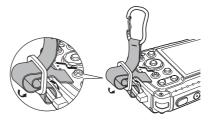
| Screen Display | Battery Status |
|--------------------|--|
| (green) | Adequate power remains. |
| (green) | Batteries are running low. |
| (yellow) | Batteries are running very low. |
| (red) | Batteries are exhausted. |
| [Battery depleted] | The camera will turn off after this message appears. |

Preparing the Camera for Use

Prepare your camera for use before you start using it.

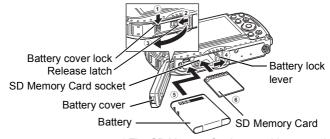
Attaching the Carabiner Strap

Attach the carabiner strap supplied with the camera as shown in the illustration.



Installing the Battery and SD Memory Card

Install the battery and SD Memory Card as shown in the illustration.



* The SD Memory Cards are sold separately.

The inside of the battery compartment is not waterproof.

- In places where the camera is exposed to water or dirt such as underwater, at the beach, in a kitchen, etc., make sure that the battery cover lock and release latch are firmly locked so that they won't open unexpectedly. Do not open the cover in such places.
- When removing the battery or card, avoid places where the camera may be exposed to water or dirt, and make sure that the camera, battery, card, and your hands are completely dry.

Turning the Camera On

Pressing the Power Button

The camera turns on and is ready to take still pictures. Press the power button again to turn the camera off.



Making the Initial Settings

The [Language/言語] screen appears when the camera is turned on for the first time. Select the desired language and then set the date and time.

- Use the four-way controller (▲ ▼ ◀ ▶) to select the desired language.
- 2 Press the **OK** button. The [Initial Setting] screen appears.

Memo

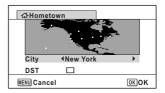
If you accidentally select the wrong language and press the **OK** button, press the four-way controller (▶), use the four-way controller (▲ ▼ ◀ ▶) to select the desired language, and then press the **OK** button. The [Initial Setting] screen appears in the selected language.



③ Press the four-way controller (▼) to move the frame to [☆ Hometown].



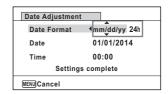
Press the four-way controller (►). The [☆ Hometown] screen appears.



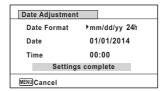
- ⑤ Use the four-way controller (◀▶) to choose a city.
- ⑥ Press the four-way controller (▼) to move the frame to [DST] (Daylight Saving Time).
- Use the four-way controller (◀ ▶) to select
 or □ and press the OK button.

The [Initial Setting] screen reappears.

- Press the four-way controller (▼) to select [Settings complete], then press the OK button.
 The [Date Adjustment] screen appears.
- Press the four-way controller (►) to move the frame to [mm/dd/yy], then use the four-way controller (▲▼) to choose the date format.



- Press the four-way controller (►) to select [24h], then use the four-way controller (▲ ▼) to select [24h] (24-hour display) or [12h] (12-hour display).
- Press the four-way controller (►), then press the four-way controller (▼) to move the frame to [Date].
- Press the four-way controller (►) to select [01] (month), [01] (day) or [2014] (year), then use the four-way controller (▲ ▼) to set the current date.
- Press the four-way controller (►), then press the four-way controller (▼) to move the frame to [Time].
- (4) Set the time in the same manner as in (2).
- ⑤ Press the four-way controller (▼) to select [Settings complete] and press the OK button.



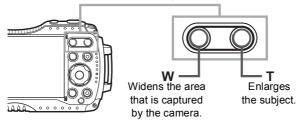
Formatting an SD Memory Card

Use this camera to format (initialize) an SD Memory Card that is unused or has been previously used on other cameras or digital devices. Be aware that formatting deletes all the data stored in the SD Memory Card.

Taking Pictures

Aim the camera at the subject, then press the shutter release button. The flash discharges automatically depending on the brightness.

- 1 Frame the subject using the focus frame on the display.
- Press the W / T button to change the captured area.



3 Press the shutter release button halfway.

The focus frame on the display turns green when the subject is in focus.

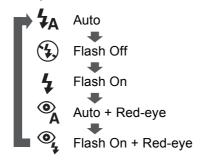
Press the shutter release button fully.

The picture is taken.



Selecting the Flash Mode

Each time you press the four-way controller (◀), the flash mode switches between the following modes.

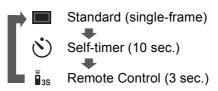


Memo

The available modes differ depending on the selected shooting mode, focus mode and drive mode.

Selecting the Drive Mode

Each time you press the four-way controller (\blacktriangle), the drive mode switches between the following modes.

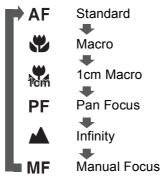


Memo

- · The available modes differ depending on the selected shooting mode.
- You can select
 \(\infty \) (2-sec. Self-timer) by pressing the four-way controller (▼)
 and then (►) after selecting \(\infty \).

Selecting the Focus Mode

Each time you press the four-way controller (\blacktriangleright), the focus mode switches between the following modes.



Memo

The available modes differ depending on the selected shooting mode.

Selecting a Shooting Mode

You can choose the optimal shooting mode for your particular situation from the Capture Mode Palette.

Press the four-way controller (▼).



Use the four-way controller ($\blacktriangle \lor \blacktriangleleft \blacktriangleright$) to choose a shooting mode, then press the **OK** button.

Memo

An explanation appears when you select a shooting mode.

●The monitor display in 4:3 aspect ratio

When [Recorded Pixels] is set to $\frac{16\text{M}}{7\text{M}}/\frac{5\text{M}}{3\text{M}}/\frac{1024}{640}$ in

[Rec. Mode], the aspect ratio of the image is 4:3 and the monitor display for image capture and playback is as shown below.





Playing Back Images

You can play back the captured images on the display.

Playing Back Images

Press the
 button after shooting.

The image appears on the display.



Memo

- To play back the previous or next image, press the four-way controller (◀▶).

Deleting Images

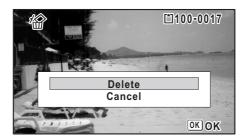
Deleting a Single Image

You can delete a single image currently displayed on the display.

- 1 Play back the image you want to delete.
- 2 Press the fi button.

The confirmation screen appears.

3 Use the four-way controller (▲) to select [Delete].



4 Press the **OK** button.

Memo

- You can delete multiple images selected from the 6- or 12-image display.
- · You can delete all images at once.
- You can protect stored images from being accidentally deleted.

Selecting a Playback Mode

You can choose the playback mode you want to use from the Playback Mode Palette.

Press the four-way controller (\blacktriangledown) while an image is displayed in playback mode.



Use the four-way controller (\blacktriangle \blacktriangledown \blacktriangle) to choose a playback mode, then press the **OK** button.

(Memo

An explanation appears when you select a playback mode.

For details about how to use the RICOH WG-4/WG-4 GPS or instructions on connecting the camera to a computer, refer to the operating manual. By visiting www.ricoh-imaging.eu you will be able to download the operating manual, to register your product, to apply for newsletters or to find the latest firmware information.

Information for Users on Collection and Disposal of Old Equipment and Used Batteries



1. In the European Union

These symbols on the products, packaging and/or accompanying documents mean that used electrical and electronic equipment and batteries should not be mixed with general household waste.



Used electrical/electronic equipment and batteries must be treated separately and in accordance with legislation that requires proper treatment, recovery and recycling of these products.

By disposing of these products correctly you will help ensure that the waste undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health which could otherwise arise due to inappropriate waste handling.

If a chemical symbol is added beneath the symbol shown above, in accordance with the Battery Directive, this indicates that a heavy metal (Hg = Mercury, Cd = Cadmium, Pb = Lead) is present in the battery at a concentration above an applicable threshold specified in the Battery Directive.

For more information about collection and recycling of used products, please contact your local authorities, your waste disposal service or the point of sale where you purchased the products.

2 In other countries outside the EU.

These symbols are only valid in the European Union. If you wish to discard used products, please contact your local authorities or dealer and ask for the correct method of disposal.

For Switzerland: Used electrical/electronic equipment can be returned free of charge to the dealer, even when you don't purchase a new product. Further collection facilities are listed on the home page of www.swico.ch or www.sens.ch.

RICOH IMAGING COMPANY, LTD.

2-35-7, Maeno-cho, Itabashi-ku, Tokyo 174-8639, JAPAN

(http://www.ricoh-imaging.co.jp)

S.A.S

RICOH IMAGING EUROPE 112 Quai de Bezons, B.P. 204, 95106 Argenteuil Cedex,

FRANCE

(http://www.ricoh-imaging.fr)

RICOH IMAGING

Am Kaiserkai 1, 20457 Hamburg, GERMANY

DEUTSCHLAND GmbH

(http://www.ricoh-imaging.de)

RICOH IMAGING UK LTD.

PENTAX House, Heron Drive, Langley, Slough, Berks

SL3 8PN, U.K.

(http://www.ricoh-imaging.co.uk)

RICOH IMAGING

633 17th Street, Suite 2600, Denver, Colorado 80202,

AMERICAS CORPORATION U.S.A.

(http://www.us.ricoh-imaging.com)

INC.

RICOH IMAGING CANADA 1770 Argentia Road Mississauga. Ontario L5N 3S7.

CANADA

(http://www.ricoh-imaging.ca)

RICOH IMAGING CHINA CO., LTD.

23D, Jun Yao International Plaza, 789 Zhaojiabang Road, Xu Hui District, Shanghai, 200032, CHINA

(http://www.ricoh-imaging.com.cn)

http://www.ricoh-imaging.co.jp/english

Specifications and external dimensions are subject to change without notice.